Exhibit C

Blast SEQ ID NO:1 versus human genomic

MEGABLAST 1.2.3-Paracel [2001-11-20]

Reference:
Zheng Zhang, Scott Schwartz, Lukas Wagner, and Webb Miller (2000),
"A greedy algorithm for aligning DNA sequences",
J Comput Biol 2000; 7(1-2):203-14.
Database: Homo_sapiens.latestgp.masked.fa
           44,521 sequences; 200,768,834,160 total letters

Query= LEX161seqid1
        (2115 letters)

	Score (bits)	E Value
Sequences producing significant alignments:		
AC016643.6.1.179969	734	0.0
AC008958.7.1.109526	520	e-144

>AC016643.6.1.179969
         Length = 179969

 Score = 734 bits (370), Expect = 0.0
 Identities = 370/370 (100%)
 Strand = Plus / Plus

Query: 957   agatgatttaagccagaagttaaaacccttgggtgaagcagaacgagagtttattttgaa   1016

              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 60550 agatgatttaagccagaagttaaaacccttgggtgaagcagaacgagagtttattttgaa   60609

Query: 1017   tttgaagaaaaaggaatgcaaagacaggggttttgaatatgatgggaaaatcaatgcctg   1076

              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 60610 tttgaagaaaaaggaatgcaaagacaggggttttgaatatgatgggaaaatcaatgcctg   60669

Query: 1077   ggatctatattactacatgactcagacagaggaactcaagtattccatagaccaagagtt   1136

              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 60670 ggatctatattactacatgactcagacagaggaactcaagtattccatagaccaagagtt   60729

Query: 1137   cctcaaggaatacttcccaattgaggtggtcactgaaggcttgctgaacacctaccagga   1196

              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 60730 cctcaaggaatacttcccaattgaggtggtcactgaaggcttgctgaacacctaccagga   60789

```
Query: 1197  gttgttgggactttcatttgaacaaatgacagatgctcatgtttggaacaagagtgttac
1256
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 60790 gttgttgggactttcatttgaacaaatgacagatgctcatgtttggaacaagagtgttac
60849


Query: 1257  actttatactgtgaaggataaagctacaggagaagtattgggacagttctatttggacct
1316
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 60850 actttatactgtgaaggataaagctacaggagaagtattgggacagttctatttggacct
60909


Query: 1317  ctatccaagg 1326
              ||||||||||
Sbjct: 60910 ctatccaagg 60919



 Score =  520 bits (262), Expect = e-144
 Identities = 262/262 (100%)
 Strand = Plus / Plus


Query: 40    agagttggtggttccaggatttttactcagaatgacgttaggaagagaagtgatgtctcct
99
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 30994 agagttggtggttccaggatttttactcagaatgacgttaggaagagaagtgatgtctcct
31053


Query: 100   cttcaggcaatgtcttcctatactgtggctggcagaaatgtttttaagatgggatctttca
159
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 31054 cttcaggcaatgtcttcctatactgtggctggcagaaatgtttttaagatgggatctttca
31113


Query: 160   ccagagcaaattaaaacaagaactgaggagctcattgtgcagaccaaacaggtgtacgat
219
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 31114 ccagagcaaattaaaacaagaactgaggagctcattgtgcagaccaaacaggtgtacgat
31173


Query: 220   gctgttggaatgctcggtattgaggaagtaacttacgagaactgtctgcaggcactggca
279
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 31174 gctgttggaatgctcggtattgaggaagtaacttacgagaactgtctgcaggcactggca
31233


Query: 280   gatgtagaagtaaagtatatag 301
              ||||||||||||||||||||||
Sbjct: 31234 gatgtagaagtaaagtatatag 31255



 Score =  405 bits (204), Expect = e-110
```

Identities = 204/204 (100%)
Strand = Plus / Plus

Query: 1324   agggaaggaaaatacaatcatgcggcctgcttcggtctccagcctggctgccttctgcct 1383
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 64886 agggaaggaaaatacaatcatgcggcctgcttcggtctccagcctggctgccttctgcct 64945

Query: 1384   gatggaagccggatgatggcagtggctgccctcgtggtgaacttctcacagccagtggca 1443
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 64946 gatggaagccggatgatggcagtggctgccctcgtggtgaacttctcacagccagtggca 65005

Query: 1444   ggtcgtccctctctcctgagacacgacgaggtgaggacttactttcatgagtttggtcac 1503
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 65006 ggtcgtccctctctcctgagacacgacgaggtgaggacttactttcatgagtttggtcac 65065

Query: 1504   gtgatgcatcagatttgtgcacag 1527
              ||||||||||||||||||||||||
Sbjct: 65066 gtgatgcatcagatttgtgcacag 65089

 Score = 379 bits (191), Expect = e-102
 Identities = 191/191 (100%)
 Strand = Plus / Plus

Query: 1526   agactgattttgcacgatttagcggaacaaatgtggaaactgactttgtagaggtgccat 1585
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 81947 agactgattttgcacgatttagcggaacaaatgtggaaactgactttgtagaggtgccat 82006

Query: 1586   cgcaaatgcttgaaaattgggtgtgggacgtcgattccctccgaagattgtcaaaacatt 1645
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 82007 cgcaaatgcttgaaaattgggtgtgggacgtcgattccctccgaagattgtcaaaacatt 82066

Query: 1646   ataaagatggaagccctattgcagacgatctgcttgaaaaacttgttgcttctaggctgg 1705
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 82067 ataaagatggaagccctattgcagacgatctgcttgaaaaacttgttgcttctaggctgg 82126

Query: 1706   tcaacacaggt 1716
              |||||||||||
Sbjct: 82127 tcaacacaggt 82137

Score = 323 bits (163), Expect = 2e-85
Identities = 163/163 (100%)
Strand = Plus / Plus

Query: 661   ggtgctcttcctgatgatttcattgacagtttagaaaagacagatgatgacaagtataaa
720
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 53694 ggtgctcttcctgatgatttcattgacagtttagaaaagacagatgatgacaagtataaa
53753

Query: 721   attaccttaaaatatccacactatttccctgtcatgaagaaatgttgtatccctgaaacc
780
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 53754 attaccttaaaatatccacactatttccctgtcatgaagaaatgttgtatccctgaaacc
53813

Query: 781   agaagaaggatggaaatggcttttaatacaaggtgcaaagagg 823
               |||||||||||||||||||||||||||||||||||||||||||
Sbjct: 53814 agaagaaggatggaaatggcttttaatacaaggtgcaaagagg 53856

Score = 301 bits (152), Expect = 8e-79
Identities = 152/152 (100%)
Strand = Plus / Plus

Query: 300   agtggaaaggaccatgctagactttccccagcatgtatcctctgacaaagaagtacgagc
359
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 35386 agtggaaaggaccatgctagactttccccagcatgtatcctctgacaaagaagtacgagc
35445

Query: 360   agcaagtacagaagcagacaaaagactttctcgttttgatattgagatgagcatgagagg
419
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 35446 agcaagtacagaagcagacaaaagactttctcgttttgatattgagatgagcatgagagg
35505

Query: 420   agatatatttgagagaattgttcatttacagg 451
               ||||||||||||||||||||||||||||||||
Sbjct: 35506 agatatatttgagagaattgttcatttacagg 35537

Score = 280 bits (141), Expect = 3e-72
Identities = 141/141 (100%)
Strand = Plus / Plus

Query: 1842   aggcacaaatatgccagctacctttggacatttggcagggggatacgatggccaatatta
1901
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||

```
Sbjct:  84687  aggcacaaatatgccagctacctttggacatttggcaggggggatacgatggccaatatta
84746


Query:  1902   tggatatctttggagtgaagtattttccatggatatgttttacagctgtttttaaaaaaga
1961
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct:  84747  tggatatctttggagtgaagtattttccatggatatgttttacagctgtttttaaaaaaga
84806


Query:  1962   agggataatgaatccagaggt  1982
               |||||||||||||||||||||
Sbjct:  84807  agggataatgaatccagaggt  84827



  Score =  270 bits (136), Expect = 3e-69
  Identities = 137/138 (99%)
  Strand = Plus / Plus


Query:  821    aggaaaacaccataattttgcagcagctactcccactgcgaaccaaggtggccaaactac
880
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct:  58207  aggaaaacaccataattttgcagcagctactcccactgcgaaccaaggtggccaaactac
58266


Query:  881    tcggttatagcacacatgctgacttcgtccttgaaatgaacactgcaaagagcacaagcc
940
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct:  58267  tcggttatagcacacatgctgacttcgtccttgaaatgaacactgcaaagagcacaagcc
58326


Query:  941    gcgtaacagcytttctag  958
               ||||||||||| |||||||
Sbjct:  58327  gcgtaacagcctttctag  58344



  Score =  268 bits (135), Expect = 1e-68
  Identities = 136/137 (99%)
  Strand = Plus / Plus


Query:  1979   aggttggaatgaaatacagaaacctaatcctgaaacctggggggatctctggacggcatgg
2038
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct:  95214  aggttggaatgaaatacagaaacctaatcctgaaacctggggggatctctggacggcatgg
95273


Query:  2039   acatgctccacaatttcttgaaacgtgagccaaaccaaaaagcgttcctaatgagtagag
2098
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct:  95274  acatgctccacaatttcttgaaacgtgagccaaaccaaaaagcgttcctaatgagtagag
95333
```

```
Query: 2099  gcctgcatgctycgtga 2115
             |||||||||||| |||||
Sbjct: 95334 gcctgcatgctccgtga 95350



 Score =  262 bits (132), Expect = 7e-67
 Identities = 132/132 (100%)
 Strand = Plus / Plus


Query: 1713  aggtcttctgaccctgcgccagattgttttgagcaaagttgatcagtctcttcataccaa
1772
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 82469 aggtcttctgaccctgcgccagattgttttgagcaaagttgatcagtctcttcataccaa
82528


Query: 1773  cacatcgctggatgctgcaagtgaatatgccaaatactgctcagaaatattaggagttgc
1832
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 82529 cacatcgctggatgctgcaagtgaatatgccaaatactgctcagaaatattaggagttgc
82588


Query: 1833  agctactccagg 1844
             ||||||||||||
Sbjct: 82589 agctactccagg 82600



 Score =  222 bits (112), Expect = 6e-55
 Identities = 116/117 (99%), Gaps = 1/117 (0%)
 Strand = Plus / Plus


Query: 443   atttacaggaaacctgtgatctggggaagataaaacctgaggccagacgatacttggaaa
502
             |||| |||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 49854 attt-caggaaacctgtgatctggggaagataaaacctgaggccagacgatacttggaaa
49912


Query: 503   agtcaattaaaatggggaaaagaaatgggctccatcttcctgaacaagtacagaatg 559
             |||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 49913 agtcaattaaaatggggaaaagaaatgggctccatcttcctgaacaagtacagaatg
49969



 Score =  208 bits (105), Expect = 1e-50
 Identities = 105/105 (100%)
 Strand = Plus / Plus


Query: 559   gaaatcaaatcaatgaagaaaagaatgagtgagctatgtattgattttaacaaaaacctc
618
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 52613 gaaatcaaatcaatgaagaaaagaatgagtgagctatgtattgattttaacaaaaacctc
52672
```

```
Query:  619   aatgaggatgataccttccttgtattttccaaggctgaacttggt  663
              |||||||||||||||||||||||||||||||||||||||||||||
Sbjct:  52673 aatgaggatgataccttccttgtattttccaaggctgaacttggt  52717




>AC008958.7.1.109526
          Length = 109526

 Score =  520 bits (262), Expect = e-144
 Identities = 262/262 (100%)
 Strand = Plus / Minus


Query:  40    agagttggtggttccaggattttactcagaatgacgttaggaagagaagtgatgtctcct
99
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct:  24199 agagttggtggttccaggattttactcagaatgacgttaggaagagaagtgatgtctcct
24140


Query:  100   cttcaggcaatgtcttcctatactgtggctggcagaaatgttttaagatgggatctttca
159
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct:  24139 cttcaggcaatgtcttcctatactgtggctggcagaaatgttttaagatgggatctttca
24080


Query:  160   ccagagcaaattaaaacaagaactgaggagctcattgtgcagaccaaacaggtgtacgat
219
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct:  24079 ccagagcaaattaaaacaagaactgaggagctcattgtgcagaccaaacaggtgtacgat
24020


Query:  220   gctgttggaatgctcggtattgaggaagtaacttacgagaactgtctgcaggcactggca
279
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct:  24019 gctgttggaatgctcggtattgaggaagtaacttacgagaactgtctgcaggcactggca
23960


Query:  280   gatgtagaagtaaagtatatag  301
              ||||||||||||||||||||||
Sbjct:  23959 gatgtagaagtaaagtatatag  23938



 Score =  323 bits (163), Expect = 2e-85
 Identities = 163/163 (100%)
 Strand = Plus / Minus


Query:  661   ggtgctcttcctgatgatttcattgacagtttagaaaagacagatgatgacaagtataaa
720
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct:  1504  ggtgctcttcctgatgatttcattgacagtttagaaaagacagatgatgacaagtataaa
1445
```

```
Query: 721   attaccttaaaatatccacactatttccctgtcatgaagaaatgttgtatccctgaaacc
780
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 1444  attaccttaaaatatccacactatttccctgtcatgaagaaatgttgtatccctgaaacc
1385


Query: 781   agaagaaggatggaaatggcttttaatacaaggtgcaaagagg 823
             |||||||||||||||||||||||||||||||||||||||||||
Sbjct: 1384  agaagaaggatggaaatggcttttaatacaaggtgcaaagagg 1342



 Score =  301 bits (152), Expect = 8e-79
 Identities = 152/152 (100%)
 Strand = Plus / Minus


Query: 300   agtggaaaggaccatgctagactttccccagcatgtatcctctgacaaagaagtacgagc
359
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 19806 agtggaaaggaccatgctagactttccccagcatgtatcctctgacaaagaagtacgagc
19747


Query: 360   agcaagtacagaagcagacaaaagactttctcgttttgatattgagatgagcatgagagg
419
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 19746 agcaagtacagaagcagacaaaagactttctcgttttgatattgagatgagcatgagagg
19687


Query: 420   agatatatttgagagaattgttcatttacagg 451
             ||||||||||||||||||||||||||||||||
Sbjct: 19686 agatatatttgagagaattgttcatttacagg 19655



 Score =  222 bits (112), Expect = 6e-55
 Identities = 116/117 (99%), Gaps = 1/117 (0%)
 Strand = Plus / Minus


Query: 443   atttacaggaaacctgtgatctggggaagataaaacctgaggccagacgatacttggaaa
502
             ||||  ||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 5344  attt-caggaaacctgtgatctggggaagataaaacctgaggccagacgatacttggaaa
5286


Query: 503   agtcaattaaaatggggaaaagaaatgggctccatcttcctgaacaagtacagaatg 559
             |||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 5285  agtcaattaaaatggggaaaagaaatgggctccatcttcctgaacaagtacagaatg 5229



 Score =  208 bits (105), Expect = 1e-50
 Identities = 105/105 (100%)
 Strand = Plus / Minus
```

```
Query:  559    gaaatcaaatcaatgaagaaaagaatgagtgagctatgtattgattttaacaaaaacctc
618
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct:  2585   gaaatcaaatcaatgaagaaaagaatgagtgagctatgtattgattttaacaaaaacctc
2526


Query:  619    aatgaggatgataccttccttgtattttccaaggctgaacttggt  663
               |||||||||||||||||||||||||||||||||||||||||||||
Sbjct:  2525   aatgaggatgataccttccttgtattttccaaggctgaacttggt  2481



  Score = 81.8 bits (41), Expect = 2e-12
  Identities = 41/41 (100%)
  Strand = Plus / Minus


Query:  1      atgatcgcccggtgccttttggctgtgcgaagcctccgcag  41
               |||||||||||||||||||||||||||||||||||||||||
Sbjct:  60390  atgatcgcccggtgccttttggctgtgcgaagcctccgcag  60350
```